

Work Order ID 74797

74797

Page 1

October 6, 2011 1:40:22 PM

Item ID: D119-646-241

Accept

N900040100

Setup Start *NS1*

Revision ID:

Item Name: Replacement Skidtube STD w/ Training Wearplates

Stop *NS2*

Start Date: 10/06/11 Start Qty: 1.00 *1*

Cust Item ID:

Required Date: 10/17/11 Req'd Qty: 1.00 *1*

Customer:

Reference:

Approvals: Process Plan: M.L.J Date: 11/10/06 Tooling: _____ Date: _____

Run Start *NR1*

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr
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D3887	B
-------	---

IIN-D119-646	B
--------------	---

100

0.00

100

DC

Document Control

Memo

0.00

Photocopy bluefile & type labels per PPP 19119-646-241 CHG001

SCRAP

110

0.00

110

Skidtubes

Skidtubes

Memo

0.00

1- inspect Mat'L D2500-1-190 for damage

2- Remove 45.3125" from d2500-1-180, deburr ends.

3- Ensure squareness of ends and scribe batch#

DR 12/05/16

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

W/O:		WORK ORDER CHANGES					
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Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

130

0.00

130

Skidtubes

Skidtubes

Memo

0.00

1-Install drill Jig DT9477 drill X-bolt spacer pilot holes using 3/16" drill

2-Open crossbolt spacer holes to finished size as per dwg D3887 (section D-D and E-E) ***DO NOT OPEN FWD Saddles Holes***

3- Deburr, blow out chips from inside of tube.

4 -Bond web in place as per Dwg D3887 & QSI 015.

A/RSikaflex-291 121221Sikaflex expire date: 13/01/04Start: 8:05 Time: 12/05/16

Finish: _____ Time: _____

***** (Adhere for 12 hours) *****

DC 12/05/16

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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Revision ID:

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Cust Item ID:

Required Date: 10/17/11 Req'd Qty: 1.00 ***1***

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

135

QC5- Inspect part completeness to step on W/O

0.00


135

QC

Memo

0.00

Quality Control

 12-5-29

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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Reference:

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Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

140

0.00

140

Skidtubes

Skidtubes

Memo

0.00

1- Bend FWD end of tube using bender 1 and bend prog. D3887.***Must use bending aid DT9544, ensure proper positioning***

2- Cut FWD end of tube as per dwg D3887.***Verify measurment***

3- Buff out marks left from bending

4- Drill FWD cap holes using DT8215. Open FWD & AFT cap holes to 0.208"

5- Open FWD saddle holes to finished size as per dwg D3887

6- Drill FWD x-bolt spacer holes to finished size (holes must be laid out manually.)

7- Drill Tow ring hole,holes must be laid out manually . Open to finished size.

8- Deburr and blow out chips from inside of tube.

12-6-19 PTO

W/O: 74797

WORK ORDER CHANGES

DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng/ Prod Mgr	Approval QC Inspector
		<i>1 beam #459</i>					

Part No: D119-646-241 PAR #:

Fault Category: Kid tubeNCR: ☒ Yes ☐ NoDQA: 12/07/24Date: 12/07/24

Resolution:

Disposition: ScrapQA: N/C Closed: 12/07/24Date: 12/2/24NCR: 12-11613

WORK ORDER NON-CONFORMANCE (NCR)

DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
<u>12-6-19</u>	<u>140</u>	<u>Tube broke while bending.</u>	<u>W</u>	<u>Scrap tube</u>	<u>CE</u>	<u>D</u>	<u>W</u>	<u>DAS</u>
		<u>RC, Process</u>	<u>12-07-18</u>	<u>NO replace.</u>	<u>12-7-18</u>	<u>12-7-18</u>	<u>12-07-18</u>	<u>16</u>
				<u>Remove I-Beam +</u>	<u>CE</u>	<u>D</u>		<u>17/07/18</u>
				<u>re-Stock</u>				

NOTE: Date & initial all entries

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Required Date: 10/17/11 Req'd Qty: 1.00 ***1***

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

150

QC5- Inspect part completeness to step on W/O

0.00

150

QC

Memo

0.00

Quality Control

160

0.00

160

Skidtubes

Memo

0.00

Skidtubes

1- Countersink crossbolt spacer holes, and prepare tube for welding, deburr.

2-Insert crossbolt spacers. Weld as per QSI 004 and Dwg D3887. Remember to back drill each hole before welding the other side. Use aluminum rod A/RAluminum Rod _____

3-Grind cross bolt welds flush as per Dwg D3887. Ensure no pin hole.

4-Counterbore x-bolt spacer holes as per Dwg D3887.

5- Deburr and blow out chips from inside of tube

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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N900040100

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Stop *NS2*

Start Date: 10/06/11 **Start Qty:** 1.00 ***1***

Cust Item ID:

Required Date: 10/17/11 **Req'd Qty:** 1.00 *** 1 ***

Customer:

Reference:

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____

Run Start *NR1*

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

170	QC5- Inspect part completeness to step on W/O	0.00
-----	---	------

170

QC	Memo	0.00
----	------	------

Quality Control

180	QC10- Inspect visual per QSI004- ground welds	0.00
-----	---	------

180

QC	Memo	0.00
----	------	------

Quality Control

190	Pressure Wash per QSI005 4.3	0.00
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190

HandFinish	Memo	0.00
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Hand Finishing

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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Required Date: 10/17/11 Req'd Qty: 1.00 ***1***

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Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
260	Identify as per dwg & Stock Location: _____	0.00							
260									
Packaging	Memo	0.00							
Packaging									
270	QC21- Final Inspection - Work Order Release	0.00							
270									
QC	Memo	0.00							
Quality Control									

*Restock
J. Brown!**MF
12-07-19*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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Picklist Print

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Work Order ID: 74797

74797

Parent Item: D119-646-241

D119-646-241

Parent Item Name: Replacement Skidtube STD w/ Training Wearplates

Start Date: 10/06/11

Required Date: 10/17/11

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP RevA: New issue DD verified by:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D2500-1-190 *D2500-1-190* Ext'n - I' Beam Tube 4"		Manufactured	No			110	Each	27.0000	1	1			
									**			DC 12/05/16	
				<u>Location</u>	B74777	<u>Loc Qty</u>	<u>Loc Code</u>						
				EG		27							
					66296	27							
D3885-1 *D3885-1* Standard Web		Manufactured	No			140	Each	12.0000	1	1			
									**			DC 12/05/16	
				<u>Location</u>		<u>Loc Qty</u>	<u>Loc Code</u>						
				LG		12							
					52421	12							
D3903-1 *D3903-1* Spacer		Manufactured	No			160	Each	15.0000	12	12			
									**				
				<u>Location</u>		<u>Loc Qty</u>	<u>Loc Code</u>						
				LG001		15							
					47476	7							
					51849	8							
D3681-1 *D3681-1* Spacer		Manufactured	No			160	Each	39.0000	8	8			
									**				
				<u>Location</u>		<u>Loc Qty</u>	<u>Loc Code</u>						
				LG		39							
					68958	2							
					69893	2							
					71845	35							

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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Picklist Print

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Work Order ID: 74797

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Parent Item: D119-646-241

D119-646-241

Parent Item Name: Replacement Skidtube STD w/ Training Wearplates

Start Date: 10/06/11

Required Date: 10/17/11

Start Qty: 1.00

Required Qty: 1.00

D2855-3	Manufactured	No	240	Each	7.0000	2	2
---------	--------------	----	-----	------	--------	---	---

D2855-3******

Cap

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
-----------------	----------------	-----------------

FP005	7	
-------	---	--

52281	7	
-------	---	--

AN3C5A	Purchased	No	240	Each	1,520.000	4	4
--------	-----------	----	-----	------	-----------	---	---

AN3C5A******

Bolt

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
-----------------	----------------	-----------------

FP-A	7	
------	---	--

115835	7	
--------	---	--

ST350	1513	
-------	------	--

116419	28	
--------	----	--

117343	314	
--------	-----	--

117764	169	
--------	-----	--

117872	2	
--------	---	--

118451	500	
--------	-----	--

119127	500	
--------	-----	--

D3904-1	Manufactured	No	240	Each	236.0000	16	16
---------	--------------	----	-----	------	----------	----	----

D3904-1******

Washer

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
-----------------	----------------	-----------------

ST090	236	
-------	-----	--

51875	236	
-------	-----	--

D3672-1	Manufactured	No	240	Each	360.0000	4	4
---------	--------------	----	-----	------	----------	---	---

D3672-1******

Phenolic Washer

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
-----------------	----------------	-----------------

ST074	360	
-------	-----	--

72229	360	
-------	-----	--

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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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D119-646-241

Parent Item Name: Replacement Skidtube STD w/ Training Wearplates

Start Date: 10/06/11

Required Date: 10/17/11

Start Qty: 1.00

Required Qty: 1.00

D3849-041 Manufactured No

240 Each

3.0000

1

1

D3849-041******

FWD WEARPLATE ASSY, STD/FLOAR GEAR

LocationLoc QtyLoc Code

FP009

3

53030

3

D3849-043 Manufactured No

240 Each

3.0000

1

1

D3849-043******

AFT WEARPLATE ASSY, STD GEAR

LocationLoc QtyLoc Code

FP009

3

52402

3

AN3C46A Purchased No

240 Each

67.0000

8

8

AN3C46A******

BOLT

LocationLoc QtyLoc Code

ST355

67

118757

17

118758

50

MS21043-3 Purchased No

240 Each

951.0000

8

8

MS21043-3******

Nut

LocationLoc QtyLoc Code

FG

72

103691

72

ST301

879

118077

1

118614

492

118686

386

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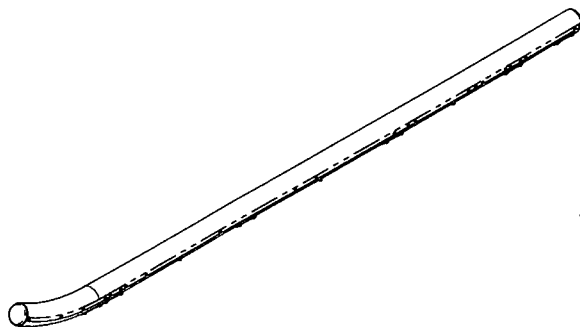
W/O:		WORK ORDER CHANGES					
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SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 74797
M.L.O
11/10/06

D3887-041 STANDARD SKIDTUBE ASSY WITH WEARPAD (SHOWN)
D3887-043 STANDARD SKIDTUBE ASSY WITH WEARPLATE (SIMILAR)
D3887-045 STANDARD SKIDTUBE ASSY WITH TRAINING WEARPLATE (SIMILAR)

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1 PRIOR TO INSERTING D3885-1 WEB
POWDER COAT "WHITE" (4.3.5.1) PER DART QSI 005 4.3
BLACK ANTI-SKID PAINT AS INDICATED TO 0.5 ABOVE LOCATION RIDGE PER DART QSI 005 4.4
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: D3887-041 = 32.0 lbs
D3887-043 = 37.0 lbs
D3887-045 = 38.1 lbs
- 8) WELD PER DART QSI 004
- 9) DAMAGE TOLERANCE ON FWD BEND:
THERE SHOULD BE NO VISIBLE WRINKLES IN THE BEND FROM THE GROUND TO A HEIGHT OF 8.5 INCHES
ABOVE THE GROUND. IT IS ACCEPTABLE TO POLISH OUT GOUGES UP 0.020" DEEP IN THE BENT
PORTION OF THE TUBE. A MAXIMUM REDUCTION IN DIAMETER OF 0.150" IS ACCEPTABLE IN THE BENT
PORTION OF THE TUBE.
- 10) INSERT D3885-1 WEB TO LOCATION SHOWN OFF AFT END OF SKIDTUBE AND BOND WEB INTO OUTER TUBE
WITH SIKAFLEX-241/-291 ADHESIVE PER DART QSI 015 BEFORE BENDING. ENSURE HOLES LINE-UP
- 11) INSERT D3492-045 PLUG ASSY INTO $\phi 0.197$ HOLES (BOTH SIDES OF TUBE)
- 12) USE DART DRILL TEMPLATE DT8931 TO LOCATE AND DRILL $\phi 0.297$ HOLES FOR WEARPLATE INSERTS.
INSTALL AELS-1032-130 INTO D3887-11 ONLY. INSTALL AN3C5A BOLTS AND NAS1149C0332R WASHERS
WITH SIKAFLEX-241/-291.

ITEM	QTY -041	QTY -043	QTY -045	P/N	DESCRIPTION
1	X			D3887-041	STD SKIDTUBE ASSY WITH WEARPAD
2		X		D3887-043	STD SKIDTUBE ASSY WITH WEARPLATE
3			X	D3887-045	STD SKIDTUBE ASSY WITH TRAINING WEARPLATE
11	2	2	2	D2855-3	CAP
12	16	16		D3492-045	PLUG ASSY
13	4	4	4	D3672-1	PHENOLIC WASHER
14	8	8	8	D3681-1	SPACER
15	5			D3846-1	GASKET
16	1			D3846-11	GASKET
17	5	5		D3847-1	WEARPAD
18	1	1		D3847-11	AFT WEARPAD
19		1		D3847-043	FWD WEARPLATE ASSY
20		1		D3847-045	CENTER WEARPLATE ASSY
21		1		D3847-047	AFT WEARPLATE ASSY
22			1	D3849-041	FWD TRAINING WEARPLATE ASSY
23			1	D3849-043	AFT WEARPLATE ASSY
24	1	1	1	D3885-1	STANDARD WEB
25	1	1		D3887-11	STANDARD SKIDTUBE
26			1	D3887-13	STANDARD SKIDTUBE
27	12	12	12	D3903-1	SPACER
28			16	D3904-1	WASHER
41	30	30		ALS4-1032-130	INSERT
42	34	34	4	AN3C5A	BOLT
43			8	AN3C46A	BOLT
44	34	34		NAS1149C0332R	WASHER (OR AN960C10L)
45			8	MS21043-3	NUT

RELEASED
09/07/06

B	ALS4-1032-130 WAS AELS-1032-130, ZN C4-1, C5-7, C3-7; ADD DT8931, ZN A6-1; ADD 134-04, ZN C4-8, D2855-3 WAS D2575 (ZN D4-1, C7-2, C2-2, C7-3, C2-3, C7-4, C2-4); AN3C5A WAS AN3C4A (ZN C6-2, C2-2, C6-3, C2-3, C6-4, C2-4)	RF	09.06.30
A	NEW ISSUE	RF	09.03.30
REV.	DESCRIPTION	BY	DATE
DESIGN	RF	DART AEROSPACE USA, INC.	
DRAWN	RF	PORT HADLOCK, WA	
CHECKED	RF	DRAWING NO.	REV. B
MFG. APPR.	RF	D3887	SHEET 1 OF 8
APPROVED	RF	TITLE	SCALE
DE APPR.	RF	A119 STD SKIDTUBE ASSY	NTS
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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

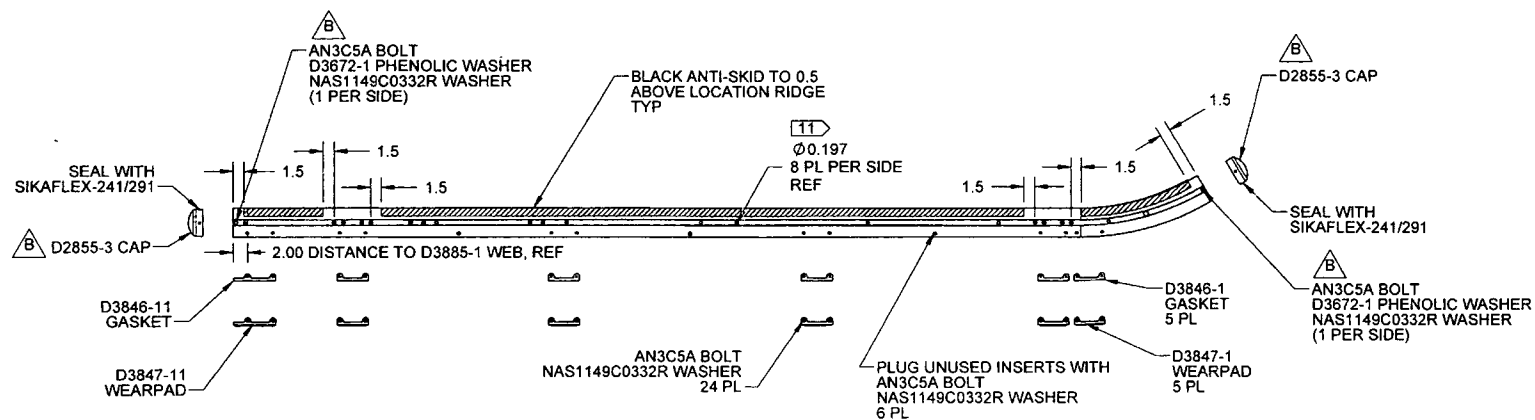
Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

74797



D3887-041 STANDARD SKIDTUBE ASSY WITH WEARPAD
(MAKE FROM D3887-11)

RELEASED
2/17/15

DESIGN	RF	DART AEROSPACE USA, INC.	
DRAWN	RF	PORT HADLOCK, WA	
CHECKED	RF	DRAWING NO.	REV. B
MFG. APPR.	RF	D3887	SHEET 2 OF 8
APPROVED	RF	TITLE	SCALE
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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

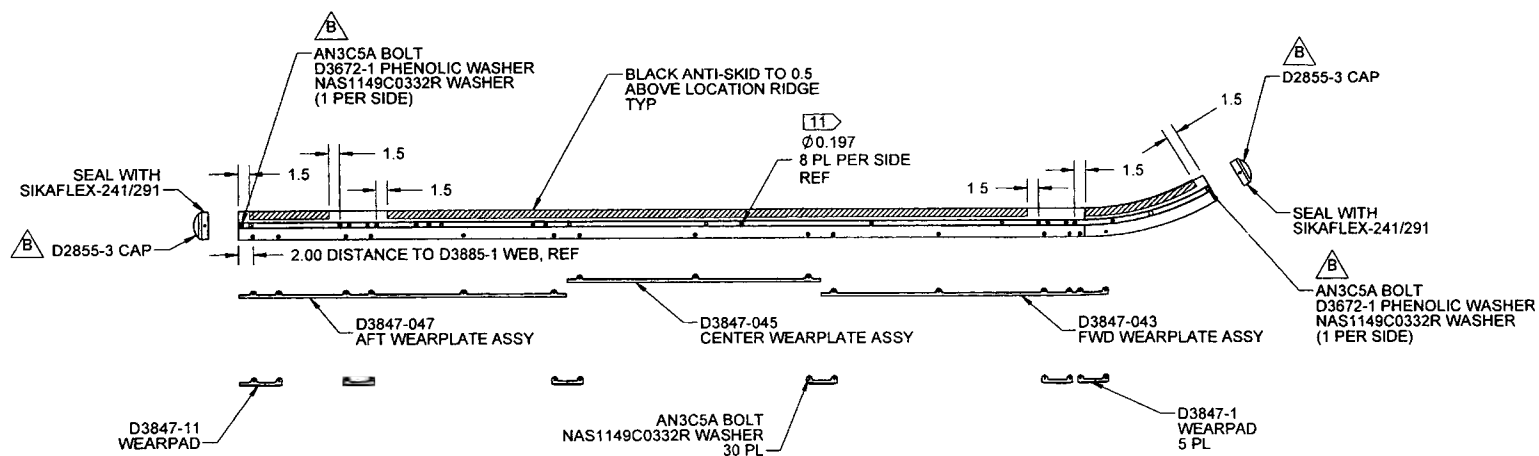
Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

74797



D3887-043 STANDARD SKIDTUBE ASSY WITH WEARPLATE
(MAKE FROM D3887-11)

RELEASED
09/07/15

DESIGN	RF	DART AEROSPACE USA, INC.	
DRAWN	RF	PORT HADLOCK, WA	
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. B
MFG. APPR.	<i>[Signature]</i>	D3887	SHEET 3 OF 8
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	A119 STD SKIDTUBE ASSY	NTS
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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

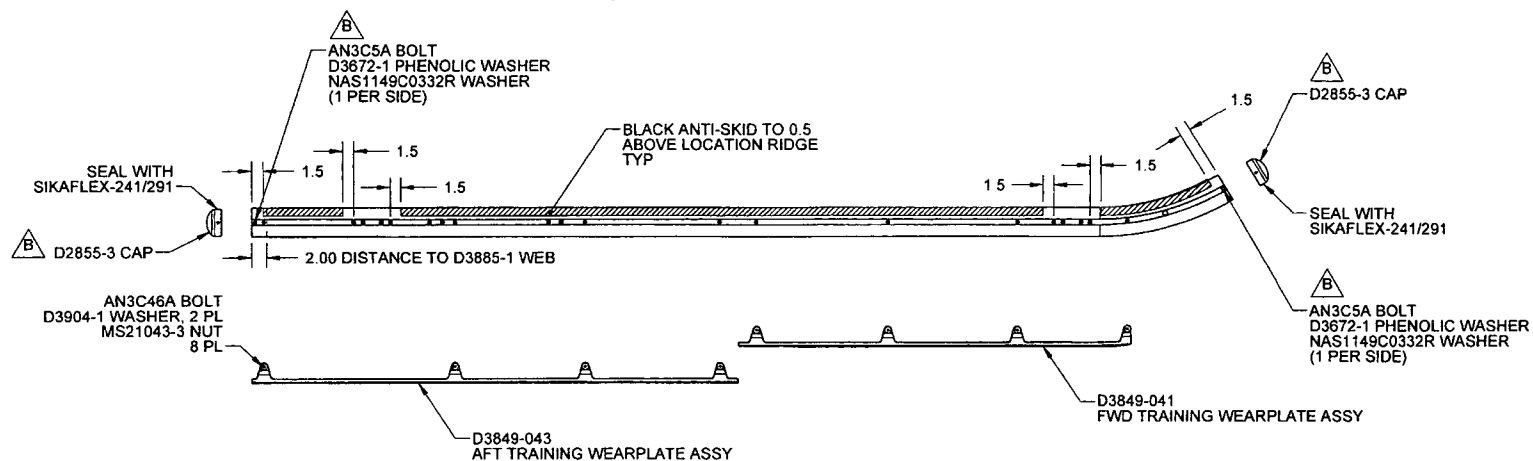
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Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

74797



D3887-045 STANDARD SKIDTUBE ASSY WITH TRAINING WEARPLATE
(MAKE FROM D3387-13)

RELEASED
21/07/19

DESIGN	RF	DART AEROSPACE USA, INC.	
DRAWN	RF	PORT HADLOCK, WA	
CHECKED	RF	DRAWING NO.	REV. B
MFG. APPR.	RF	D3887	SHEET 4 OF 8
APPROVED	RF	TITLE	SCALE
DE APPR.	RF	A119 STD SKIDTUBE ASSY	NTS
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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

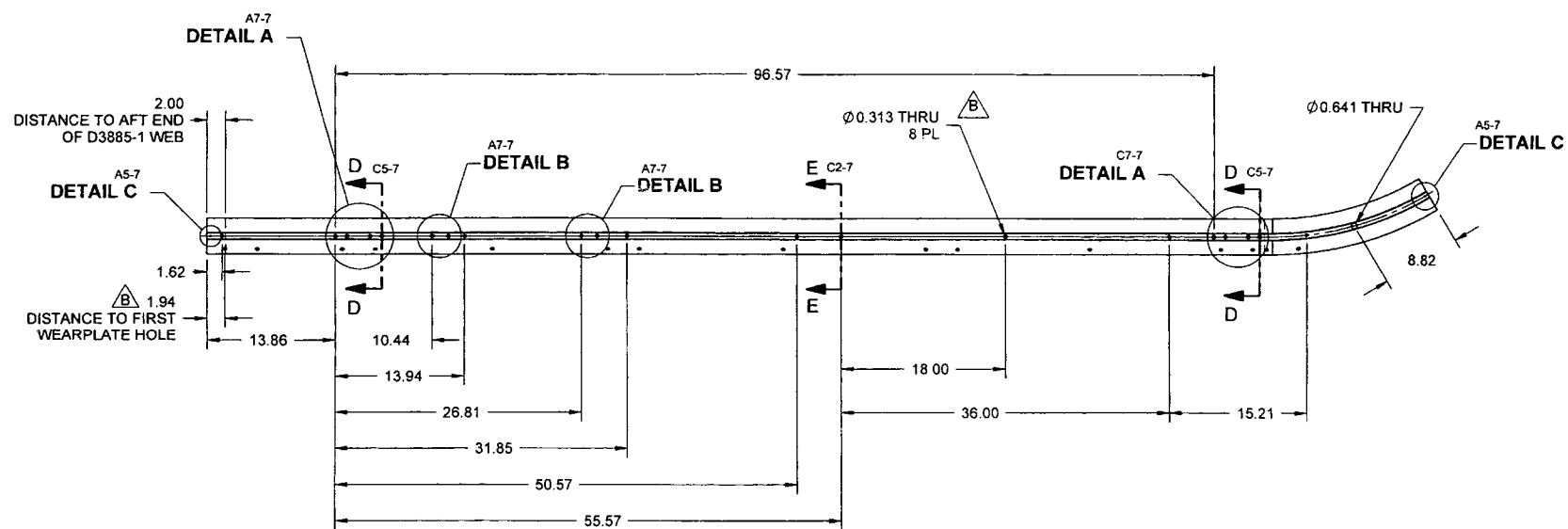
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Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

74797



D3887-11 DRILLING DETAIL
(MAKE FROM D3887-1)

RELEASED
01/15/15

DESIGN	RF	DART AEROSPACE USA, INC.	
DRAWN	RF	PORT HADLOCK, WA	
CHECKED	RF	DRAWING NO.	REV. B
MFG. APPR.	RF	D3887	SHEET 5 OF 8
APPROVED	RF	TITLE	SCALE
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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

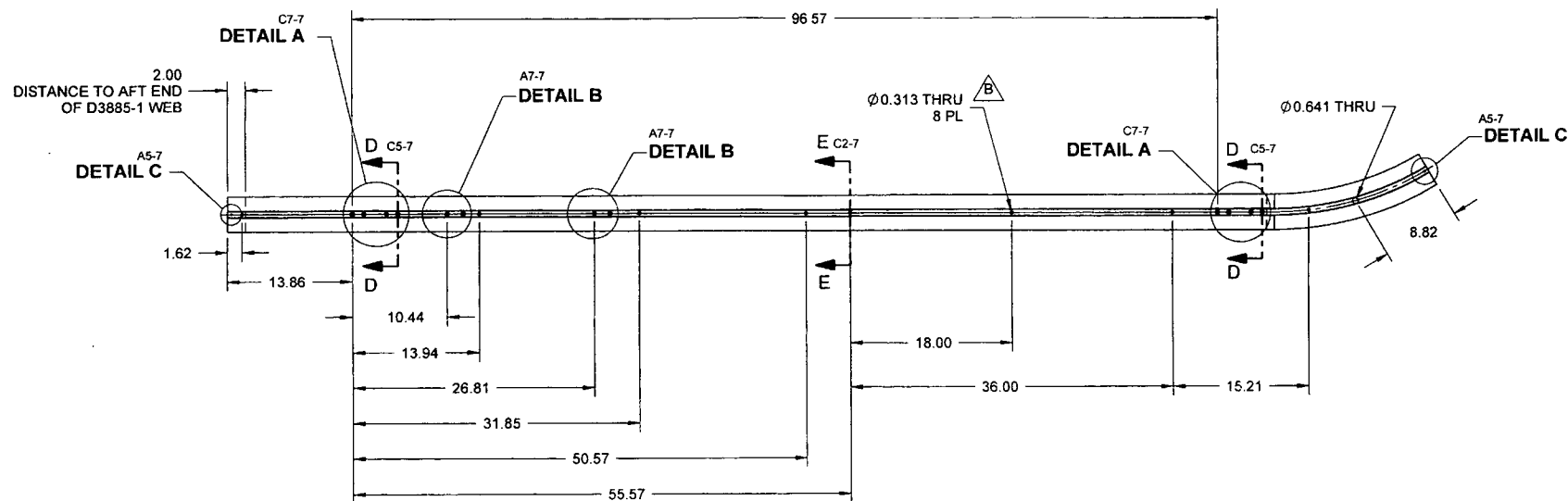
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Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

74797



D3887-13 DRILLING DETAIL
(MAKE FROM D3887-1)

RELEASED
01/15/14

DESIGN	RF	DART AEROSPACE USA, INC. PORT HADLOCK, WA	
DRAWN	RF		
CHECKED	RF	DRAWING NO.	REV. B
MFG. APPR.	RF	D3887	SHEET 6 OF 8
APPROVED	RF	TITLE	SCALE
DE APPR.	RF	A119 STD SKIDTUBE ASSY	NTS
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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

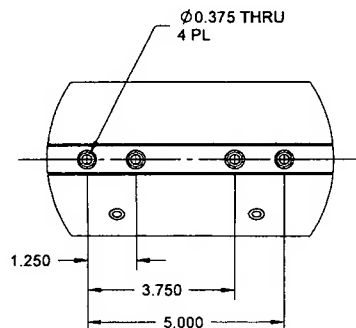
Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

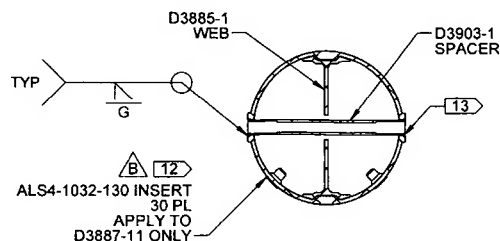
NOTE: Date & initial all entries

74797



DETAIL A
SCALE 4X

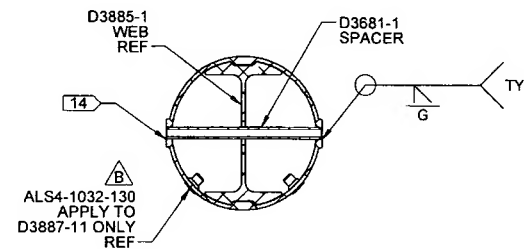
D7-5
C3-5
D7-6
C3-6



SECTION D-D
SCALE 4X

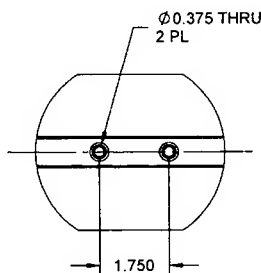
(FOR 12 X Ø0.375 HOLES
PER SKIDTUBE)

C7-5
C3-5
C7-6
C2-6



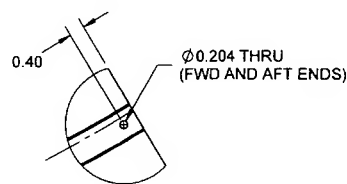
SECTION E-E
SCALE 4X
(FOR 8 X Ø0.313 HOLES
PER SKIDTUBE)

C4-5
C4-6



DETAIL B
SCALE 4X

C6-5
C5-5
C6-6
C5-6



DETAIL C
TYPICAL
SCALE 4X

C8-5
C1-5
C8-6
C1-6

NOTES:

13) AFTER DRILLING AND BENDING ASSEMBLY
PERFORM THE FOLLOWING FOR Ø0.375 HOLES ONLY:

- i) CHAMFER HOLES Ø0.475 x 45°
- ii) INSERT D3903-1 SPACER
- iii) WELD INTO PLACE AND GRIND FLUSH
- iv) C BORE TO 0.313 x 0.75 DEEP
- v) DEBURR HOLES

△B
△B

14) AFTER DRILLING AND BENDING ASSEMBLY
PERFORM THE FOLLOWING FOR Ø0.313 HOLES ONLY:

- vi) CHAMFER HOLES Ø0.354 x 45° OR 0.050 DEEP x 45° (BOTH SIDES)
- vii) INSERT D3681-1 SPACER
- viii) WELD INTO PLACE AND GRIND FLUSH
- ix) DEBURR HOLES

RELEASED
09/07/03

DESIGN	RF	DART AEROSPACE USA, INC.	
DRAWN	RF	PORT HADLOCK, WA	
CHECKED	RF	DRAWING NO. D3887	REV. B
MFG. APPR.	RF	SHEET 7 OF 8	
APPROVED	RF	TITLE A119 STD SKIDTUBE ASSY	SCALE NTS
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DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

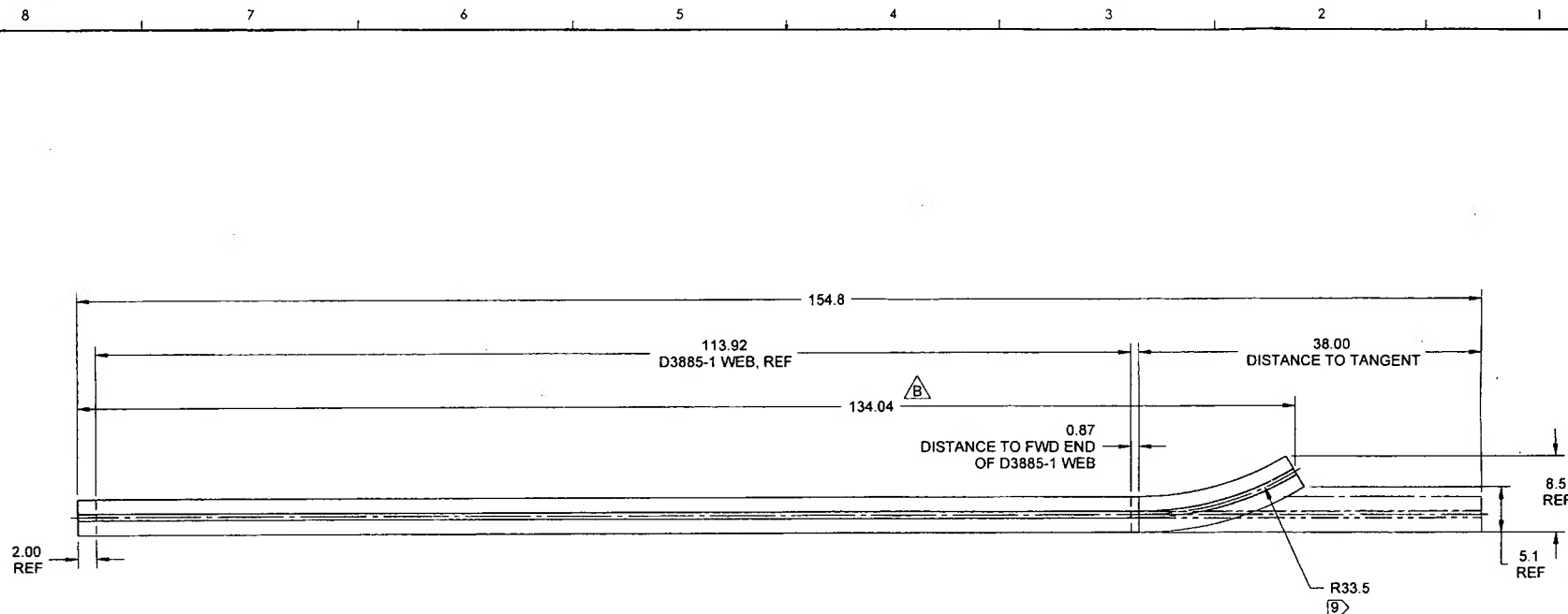
Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

74797



D3887-1 BEND DETAIL
(MAKE FROM D2500-1-190 EXTRUSION)

RELEASED
10/16/15

DESIGN	RF	DART AEROSPACE USA, INC.	
DRAWN	RF	PORT HADLOCK, WA	
CHECKED	RF	DRAWING NO.	REV. B
MFG. APPR.	RF	D3887	SHEET 8 OF 8
APPROVED	RF	TITLE	SCALE
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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries